

IN THE CLAIMS:

1.

(Currently Amended) A connector structure of a permanent magnet DC motor, the motor having brushes and a metal motor housing, the connector structure comprising:

a connector body disposed outside of the metal motor housing,

lead structure housed by the connector body, the lead structure having leads constructed and arranged to be connected to a source of power to power the motor, the lead structure having ends, and leg portions connecting the leads to the ends,

a printed circuit board mounted within a portion of the connector body and carrying at least one electro-magnetic interference (EMI) suppression component constructed and arranged to suppress EMI generated by the motor, the ends of the lead structure being soldered to the printed circuit board so that current can be provided through the printed circuit board to the brushes, with the legs portions being generally parallel with the printed circuit board, and

a contact member electrically connected between the printed circuit board and the metal motor housing so that the at least one EMI suppression component couples the brushes of the motor to the metal motor housing thereby causing the metal motor housing to become an AC ground and EMI shield, and

a plastic cover structure over-molded to cover an entire surface of the printed circuit board, with a surface defined by the over-molded cover structure being completely exposed to atmosphere.

2. (Original) The connector structure of claim 1, wherein the at least one EMI suppression component is a surface mounted device.

3. (Original) The connector structure of claim 1, wherein the at least one EMI suppression component includes a capacitor.

4. Canceled

5. Canceled
6. (Currently Amended) The connector structure of claim 1 5, wherein the connector body includes a recess, the circuit board being mounted to the connector body within the recess.
7. (Previously Presented) The connector structure of claim 6, wherein the cover structure is constructed and arranged to fill the recess and cover the entire printed circuit board.
8. (Previously Presented) The connector structure of claim 1, wherein the leads extend generally transversely with respect to the leg portions.
9. (Currently Amended) A permanent magnet DC motor having electro-magnetic interference (EMI) suppression, the motor including:
 - a metal motor housing; and
 - a brush card assembly comprising:
 - brushes,
 - lead structure having leads constructed and arranged to be coupled with a source of power to power the motor, the lead structure having ends, and leg portions connecting the leads to the ends,
 - a housing having a first portion housing the brushes and being operatively associated with the metal motor housing, and a second portion integral with the first portion and housing the leads, the second portion of the housing being disposed outside of the motor housing,
 - a printed circuit board mounted solely with respect to the second portion of the housing and carrying at least one electro-magnetic interference (EMI) suppression component constructed and arranged to suppress EMI generated by the motor, the ends of the lead structure being soldered to the printed circuit board so that current can be provided through the printed circuit

board to the brushes, with the legs portions being generally parallel with the printed circuit board, and

a contact member electrically connected between the printed circuit board and the metal motor housing so that the at least one EMI suppression component couples the brushes to the metal motor housing thereby causing the metal motor housing to become an AC ground and EMI shield, and

a plastic cover structure over-molded to cover an entire surface of the printed circuit board, with a surface defined by the over-molded cover structure being completely exposed to atmosphere.

10. (Original) The motor of claim 9, wherein the at least one EMI suppression component is a surface mounted device.
11. (Original) The motor of claim 9, wherein the at least one EMI suppression component includes a capacitor.
12. Canceled
13. (Original) The motor of claim 9, wherein the second portion of the housing includes a recess, the circuit board being mounted within the recess.
14. (Currently Amended) The motor of claim 13, wherein ~~further including a cover structure, the cover structure is being~~ over-molded to fill the recess and cover an entire surface of the printed circuit board.
15. (Previously Presented) The motor of claim 9, wherein at least a portion of each lead extends generally transversely with respect to the leg portions.
16. (Original) The motor of claim 9, wherein the metal motor housing includes an open end and the first portion of the housing is disposed within the open end in

such a manner that at least a portion of the contact member contacts an interior surface of the metal motor housing.

17. Canceled

18. Canceled